VSTR USER & TRAINING MANUAL

FOR TRAUMA REGISTRARS

Office of Emergency Medical Services
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See pages 29-30 for Index of changes

VSTR USER & INSTRUCTIONAL TRAINING MANUAL

This manual will explain: HOW TO ENTER DATA INTO THE WEB BASED STATEWIDE TRAUMA REGISTRY APPLICATION

INTRODUCTION TO THE EMS TRAUMA REGISTRY WEB APPLICATION:

The EMS Trauma Registry application is an automated web based system used to collect mandated retrospective data on trauma patients with injuries resulting in hospitalization, transfer or death.

VIRGINIA STATE LAW:

The Virginia Statewide Trauma Registry (VSTR) was mandated by the state legislature in Virginia as of July 1, 1987.

The **Code of Virginia** statute §32.1-116.1 outlines the reporting procedure for the trauma registry through establishment of the Emergency Medical Services Patient Care Information System. **ALL hospitals with 24 hour Emergency Services and inpatient facilities are required by law to submit data to the VSTR.**

OEMS determines the format for reporting data which must be submitted WITHIN 30 DAYS FROM THE END OF THE QUARTER.

PATIENT REPORTING CRITERIA:

1. Injured/Trauma **patients admitted** to the facility with ICD9-CM codes of 348.1, 800.0 - 959.9, 994.0 and 994.1, excluding 905-909 (late effect injuries), 910-924 (blisters, contusions, abrasions and insect bites), and 930-939 (foreign bodies).

Code 348.1 is for anoxic brain injury, **Code 994.0** is for lightning strike and **Code 994.1** is for drowning/submersion.

> *This reporting includes:*
> *- **ALL admissions for observation, including 23 hours** as an inpatient; NOT ER observation unless held in the ER due to no inpatient bed availability. Patients not admitted to an inpatient status do not need to be reported.*
>
> *- **All admissions for patients** where the trauma codes are **secondary diagnoses**.*

2. Injured/Trauma **patients transferred** from one hospital to another (inter hospital) because of acute trauma (patient may be transferred directly from the Emergency Department or from an inpatient unit.

3. **Victims of acute trauma that die** within the hospital, including, the emergency department and those who are DOA ***after arrival*** to the hospital.

Patients meeting any of the above criteria must be reported.

PURPOSE OF THE TRAUMA REGISTRY:

The purpose of the Virginia Statewide Trauma Registry is to provide a database of patients injured in Virginia and admitted to hospitals in Virginia or surrounding states.

Trauma registries are an integral part of the operations of a trauma center. The quality of trauma registry data is of great importance to the overall success of trauma programs for performance improvement, research, injury prevention, resource utilization, and the creation of state standards and benchmarks

A key element in the performance improvement process is having accurate data portraying trauma patient injury, severity, process of care, outcome measures, type of trauma, and cause of injury. The trauma registry functions as the information resource driving this process. Thorough reporting therefore is CRITICAL. Collected information will be used to:

1. Study the epidemiology of injury in Virginia
2. Provide feedback to participating hospitals
3. Evaluate and Improve the Trauma Care delivery system in Virginia
4. Develop injury prevention programs
5. Assist health care and social service agencies which provide services to the injured.
6. Participate in regional and national injury databases
7. Assist in the development of trauma system policy and legislation

The big picture and ultimate **goal** is to prevent accidental injury and death and to promote better hospital outcomes.

COMPLETE AND ACCURATE REPORTING OF DATA IS REQUIRED FOR THE INFORMATION TO BE USEFUL.

To **request** Trauma Registry database information from the Virginia Statewide Trauma Registry complete the form located at the OEMS web site located at:
http://www.vdh.virginia.gov/oems/Files_page/trauma/TraumaRegistryDBRequest.pdf

The VDH **Virginia Statewide Trauma Registry on-line** link is located at:
https://vdhems.vdh.virginia.gov/pls/ems_reg/loginmain

(*Note: This site requires a user name and password provided by our technical staff in the OIM Help Desk*):

The VDH OEMS **Trauma Registry Support Site on-Line** link is located at:
https://vdhems.vdh.virginia.gov/support/

Click on **Contact Us** on the left side of this link for information from the **Help Desk**: This link lists phone numbers, fax numbers, and email addresses for obtaining help related to the web based Trauma Registry application.

OIM Help Desk Phone Number:	(804) 864 7200 ext 2 (for EMS Trauma Registry)
OIM Help Desk FAX Number:	(804) 864 7155
OIM FAX number:	(804) 864 7156
OIM Help Desk email:	Manned by staff - oim_webappshelp@vdh.virginia.gov

Computer Security Awareness Requirements for Emergency Medical Services (EMS) Trauma Application-Users:

A. All Application-Users are required to read the below listed Virginia Department of Health computer security awareness best practices policies and agree to abide by them when signing the EMS Trauma application user Access and Confidentiality agreement.

B. All Application-Users must be aware that:

1) Application-Users are not permitted to share passwords except for screen saver passwords and then only when management documents in writing that it is necessary to share.

2) Application-Users must locate their desktops / laptops in a direction that does not permit unauthorized individuals to view client information.

3) Application-Users must use password-protected desktops / laptops when accessing personal health information of clients.

4) Application-Users must ensure that Virus Protection is implemented on all laptops / desktops.

5) Application-Users must log out of the EMS trauma application when their terminal or computer is going to be left idle and unattended for a significant period of time.

1. **Access/Security: User Logon Request Forms -** All users must read the Computer Security Awareness Requirements for Emergency Medical Services (EMS) Trauma Application-Users. After reading this information, download the following two forms from the Trauma Registry Support Site.

- **Access and Confidentiality of Records** agreement (word document).
- **User Logon Request Form** EMS user logon request form (word document).

Note: Each user must complete both forms and fax them back to the number provided under Contact Us.

2. **Implementation Packets:** Browser Profile, Settings, and Downloads - this is information needed by your IT, Help Desk, Security or System Administrator to set up a computer so it will allow you to access the web site and enter data.

SETTING-UP YOUR BROWSER

IMPORTANT: Check your policy and procedure guidelines and with your IT, Help Desk and Security or System Administrator before making any changes.

Internet Explorer: The EMS Statewide Trauma Registry System is accessed with **Internet Explorer 5.5 with Service Pack 1 or above**. This browser is 128-bit encrypted and is very important to the security of this application. To verify the version of Internet Explorer being used, click on the MENU BAR at the top of the monitor's screen and click on "HELP" to reveal a drop-down menu showing "About Internet Explorer."

Adobe Acrobat 5.0: It is also recommended that **Adobe Acrobat 5.0 or higher** be installed to facilitate the running of the **Application Assistant** - an Adobe .pdf file that shows the required browser settings, how a user can Logon, obtain and change passwords. Download the latest version at: http://www.adobe.com/products/acrobat/main.html

Security Issues related to the application - Within the application, security is enforced by the following roles:

- **EMS_AGENCY_MAINTENANCE:** This role is designed to Insert, Update, Delete and View the Agency Codes Table data. The intended user would be the central office user responsible for maintaining the Agency Code Table**.**
- **EMS_AUDIT_ACCESS:** This role has view privileges on all the screens except data load screens. This role is for audit purpose on the entire system except load program screens.
- **EMS_CODE_MAINTENANCE:** This role gives the user ability to Insert, Update, Delete and View the code tables (except Agency Codes). The intended users would be the central office users responsible for maintaining the code table data.
- **EMS_DATA_LOAD:** This role is used for loading data from flat files to Tables. Intended user would be the central office user responsible for loading data from flat files to Tables.
- **EMS_HOSPITAL_ACCESS:** This role gives insert, update, view and delete privileges on the entire application with exception to security and code table screens. The intended users would be the hospital users responsible for entering the data into application, users with this role can insert, update, view and delete only the data related to their assigned hospital records.
- **EMS_REPORTS_ACCESS:** This role is designed to run various reports in the system. The intended users would be the central office users as well as Hospital Users who wants to run reports.
- **EMS_SECURITY_ADMIN:** This role is for creating and maintaining the Users, User Roles and User Hospitals in EMS system. It also has privileges to reset user password also.
- **EMS_SYSTEM_ACCESS:** This role is the most powerful role and it gives insert, update, view and delete privileges on the entire application except security screens, user with this role can view the security screens. The intended users would be the central office users who will be responsible for trouble shooting the problems in the whole application.
- **EMS_VIEW_ACCESS ROLE:** This role is designed to view the data of the whole application with exception of security screens. The intended users would be the central office users responsible for auditing all hospitals data.

COMMON SYMBOLS AND BUTTONS: This application uses many of the same symbols and buttons. A brief description of them follows:

*** (a single asterisk)** indicates that the field is **conditionally required**. (Example: RESIDENCE FIPS is only required when the patient is a resident of Virginia, whereas, RESIDENCE FIPS is not required for non-residents.)

**** (double asterisks)** indicate that the field is **required**.

"COUNT" button, when clicked, will give the total number of records in the database for the specific client, etc.

"DELETE" button, when clicked, will delete a record from the database.

"Delete?" (check box), appears on only a few of the web pages. Clicking in this box indicates that the *individual record* marked with a **check mark (**v**)** will be deleted when the **UPDATE button** is clicked.

"FIRST" button is a navigational button allowing the user to access the first page of a retrieved list.

"INSERT" button is used to save the information into the database.

"INSERT/UNDO button" combination, only appears on a few of the INSERT web pages. On these web pages, when a new record is started, a **check mark (**v**)** will appear next to an **UNDO button** indicating that the adjacent record will be entered into the database when the **UPDATE button** is clicked. To remove the record before saving it, click on the **UNDO button** to delete it.

"LAST" button is a navigational button allowing the user to access the last page of a retrieved list.

"NEW" button should be clicked to enter a new record into the database

"NEXT" button is a navigational button allowing the user to access the next page of a retrieved list.

"PREVIOUS" button is a navigational button allowing the user to access the previous page of a retrieved list.

"QUERY" button is used to perform a search and retrieve existing records in the database.

"REQUERY" button will refresh the record in the event any updates or deletions have been made in the database.

"UNDO" button is used to clear the record before it is saved into the database, for instance, to correct errors or amend information. (Note: The

"ESC" (escape) key on the keyboard acts as an **UNDO button** on any pages where an **UNDO button** exists. HOWEVER, it will NOT work on any field having a drop-down arrow; only the **UNDO button** will clear these fields. Be aware, however, that any "defaulted" values will also revert to these original defaults when "undo" is executed.)

"UPDATE" button is used to save amended information into the database.

TIPS AND SUGGESTIONS:

Monitor Screen Setting:
The EMS application is viewed best when set to 1024 x 768 pixel resolution. To check and/or adjust the monitor's screen settings to assure that they conform to this recommended setting, the user should follow these steps:

1) Click on **START SETTINGS CONTROL PANEL DISPLAY**
2) Clicking on the **Display icon** will reveal the **Display Properties pop-up box.**
3) Click on the **SETTINGS tab** to view the current pixel settings in the **"Desktop Area"**
4) Slide the arrow to **1024 x 768 pixels** (ONLY, if the setting differs, of course)
5) Finally, click the **APPLY button** and then the **OK button**. (*Note: Windows may instruct the user to restart the computer before the new settings can be applied. Follow the on-screen instructions if this occurs.*)

Need Help?
Use the **HELP link** located in the top-right corner of each web page to generate an on-screen **HELP pop-up box** created to guide the user in data entry.

How to Search
Search for a Specific Field in the On-Screen Help Text:
A quick scan of the on-screen HELP pop-up boxes will show that these boxes will often contain field definitions for fields which do NOT appear on the web page currently being viewed. This occurs because the help text has been created to serve all of the web pages within the same module. (For example, the ADMISSIONS DETAILS web pages HELP pop-up box will contain approximately 20 definitions despite the fact that some ADMISSIONS DETAILS web pages only show eight fields.)

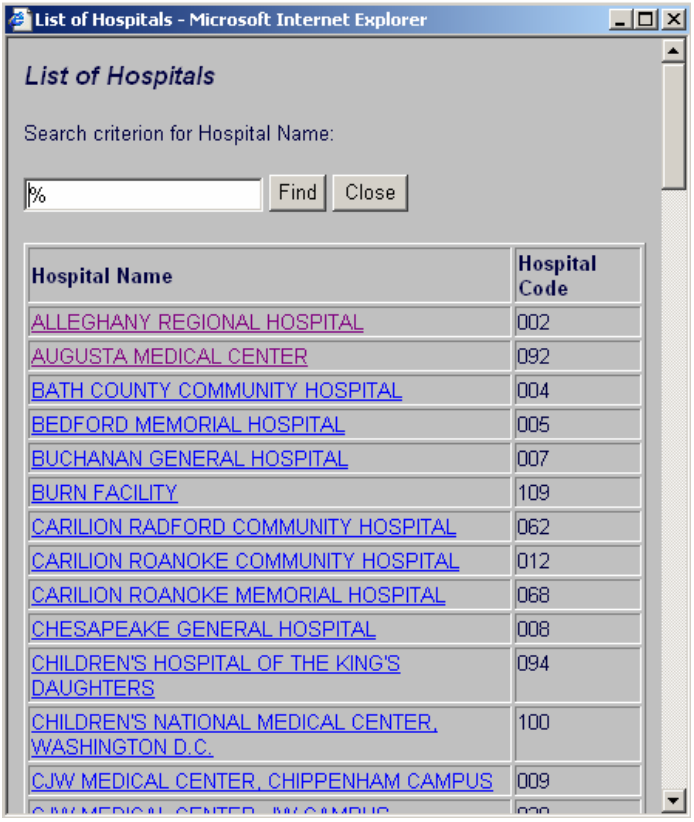
Therefore, each HELP pop-up box has *search capability* to enable users to find what they need as easily as possible.

To quickly access a specific field's information, enter the *"field's label name"* exactly as it appears on the screen into the *blank field at the top of the pop-up box*. Then, click on the "FIND" button to reveal the requested information.

LOV Searches:
What is LOV?

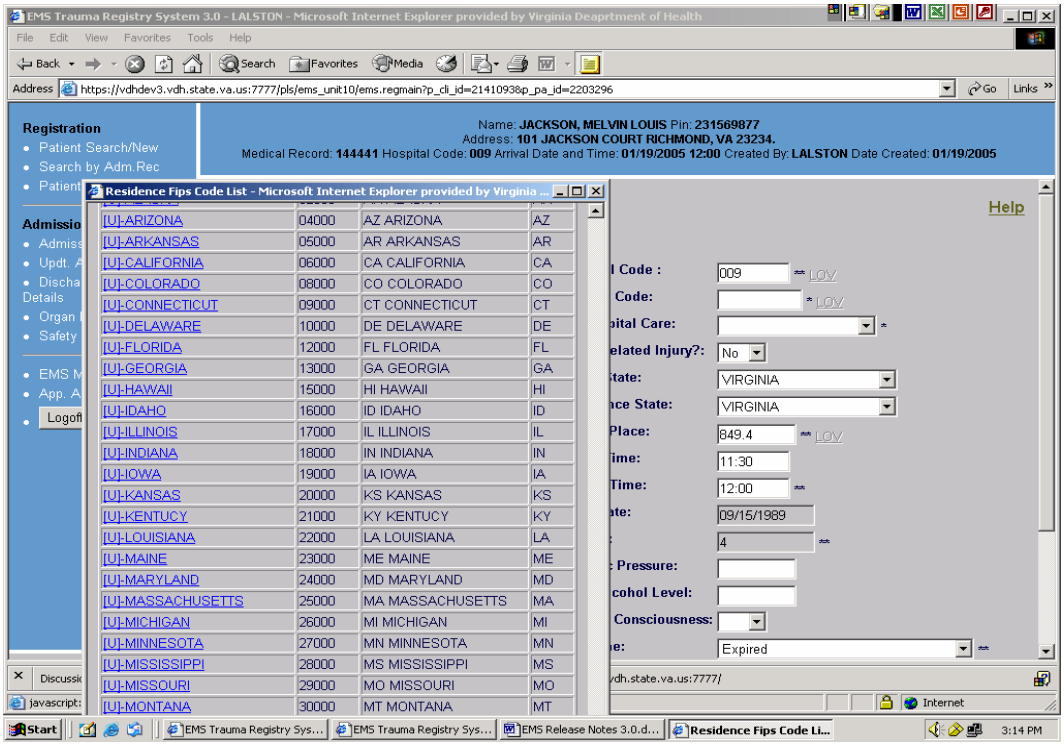
LOV stands for **List of Values**. In the Application it may seem that the LOV link is disabled but if you move the Mouse Cursor on the LOV, the link will change the color from grey to blue 

The User can search values for any field which has the LOV list next to that field. For example if the User doesn't know the Hospital Code but knows the Hospital Name in the Admission Record of the EMS Trauma Registry Application, he can click on the **LOV** link and the List of Hospitals will be opened in a new window (as shown below):



The User can now select the corresponding Hospital Code from the Hospital name by clicking on the Hospital name.

Each non-Virginia state will display only ONE FIPS CODE for that entire state as shown below.



Below are the various ways that the User's can use the LOV to do the searches.

A. **About QUERY web pages**: On QUERY web pages only, when certain LOV searches are performed, the value UNKNOWN may appear. This UNKNOWN value indicates that this field is NULL and, therefore, may be left BLANK.

B. **Voluminous "pop-up box" directive**: Occasionally, when an LOV search is attempted, a pop-up box message will be generated, informing the user that there is a voluminous, or very extensive, list of values available for selection. Furthermore, in order to perform an effective search, it is recommended that the user enter at least one but, preferably, several alpha or numeric characters into the adjacent field to narrow the resultant listing.

• On **Multi-Record Web Pages**, the **NEXT** and **PREVIOUS buttons** will only appear when there is a total of 6 or more records. Web pages are created with six lines. When a page is full, pressing the **NEXT button** will reveal a page with six new lines.

• **Exiting Web Pages and/or Pop-Up Boxes**: Be sure to exit out of any web pages or pop-up boxes when you are finished working in them. Otherwise, when you attempt to use that web page or pop-up (the same applies to LOV's and down arrows), it will NOT work and may also give an error message.

How to Log-On/Change Password:
When the user first logs onto their Computer and enters the correct URL (Universal Resource Locator), the first thing they will encounter will be an **"Enter Network Password" pop-up box** similar to the one seen in the next view:

After entering their **"User Name"** and **"Password"** into the respective fields shown above, the *EMS Statewide Trauma Registry System's Main Menu* web page will be generated upon clicking the **OK button**:

The **CHANGE PASSWORD link** should then be clicked if the user needs to change their existing password. This action will reveal the following:

CHANGING PASSWORD:
After inserting information in the **"New Password" and "Confirm Password" fields,** the user should then click on the **CHANGE PASSWORD button** to effect the change.

NOTE: Passwords are REQUIRED to be at least 8 characters in length. They MUST also contain a minimum of 6 alphabetic characters and 2 numerals or special characters.

SCREEN LAYOUT:

There are Two Screen Layouts in the EMS Trauma Registry Application.

1. The **Sidebar** will have all the Module links like Patient's Search, Search by Adm. Record, Admission Records, Diagnosis Details, etc.

2. The **Header** will contain information about the Patients Details like Name, Pin Number and Address.

APPLICATION HELP:

There are two levels of Help available in the EMS Trauma Registry Application.

1. The **Page Level Help** will contain details about all the fields and their explanation for any given screen.

2. The **Application Assistant** will contain important information about the Set-Up for EMS Trauma Registry Application.

LOGGING ON TO THE EMS TRAUMA REGISTRY MAIN SCREEN:

Emergency Medical System Trauma Registry Web Application

The EMS Trauma Registry Application will be used to collect data on injured patients treated at a facility. The purpose of the EMS Trauma Registry application is to:

1. Provide a mechanism for comprehensive quality improvement of trauma care in participating facilities, and
2. Provide system information to the state registry to serve as a stable source of statewide trauma data.

***NOTE**: When you log in for the first time, you will be prompted to change your default password to a new password in the Real time environment but for Training purposes you do not need to change the password.*

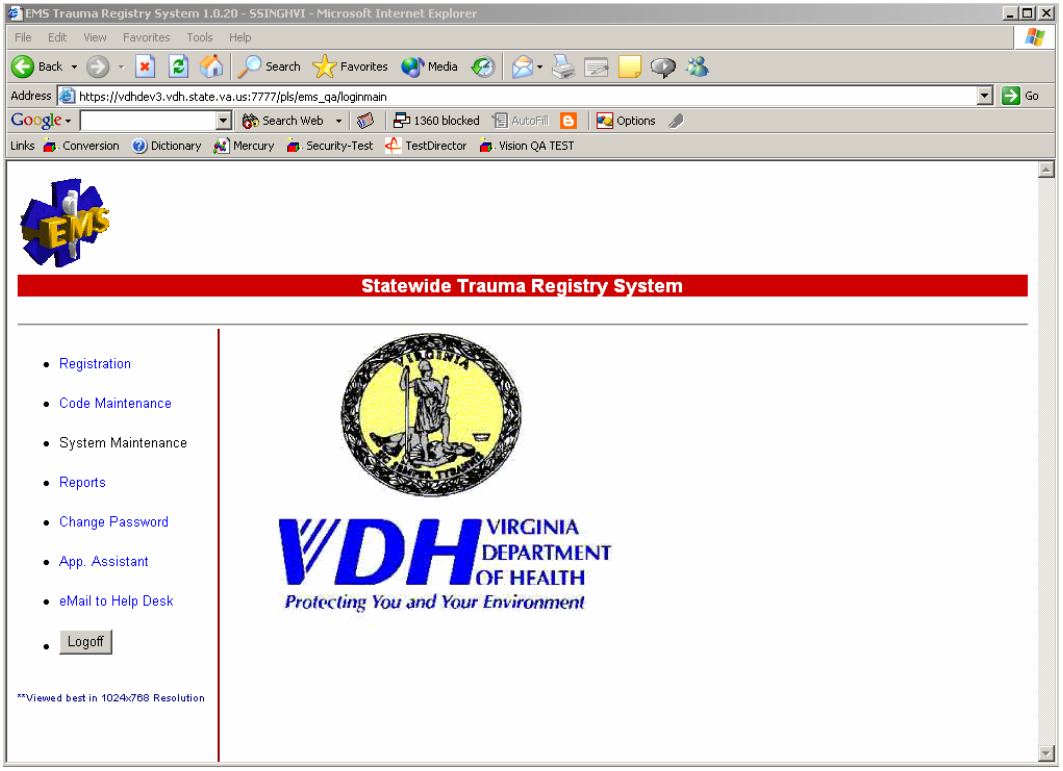
Steps to Log On:

1. Utilizing Internet Explorer, enter the application's URL:
https://vdhems.vdh.state.va.us/pls/emstrain/loginmain (***TRAINING PURPOSES ONLY)***

2. Enter Username as **HOSPUSER** and it will display on the line.
(***TRAINING PURPOSES ONLY)***

3. Tab to Password and enter your password as **HOSPUSER.** You will see ** equivalent in number to the number of characters in your password.
(***TRAINING PURPOSES ONLY)***

Select "OK" and the following screen will display.



Depending on your level of access, you can utilize the following menus:

1. **Registration** – **User** can enter a new record, query, or update existing information.

    Patient Search/New
    Search by Admission Record
    Return to EMS Main Menu
    Use the Application Assistant

2. ***Code Maintenance*** *– View, edit, delete or add hospital and agency names, and various codes (****EMS System Administration function only****).*

    Hospital Codes
    Discharge Diagnosis Code
    ECodes
    ECode Places
    Trauma Types
    Return to EMS Main Menu
    Use the Application Assistant

3. **Reports** – **User** can run reports on information submitted by your hospital.

4. **Change password** – **User** can change their password.

5. **Application Assistant** – **User** can find field definitions.

6. **Email the Help Desk** – **User** can request help, note problems or submit suggestions.

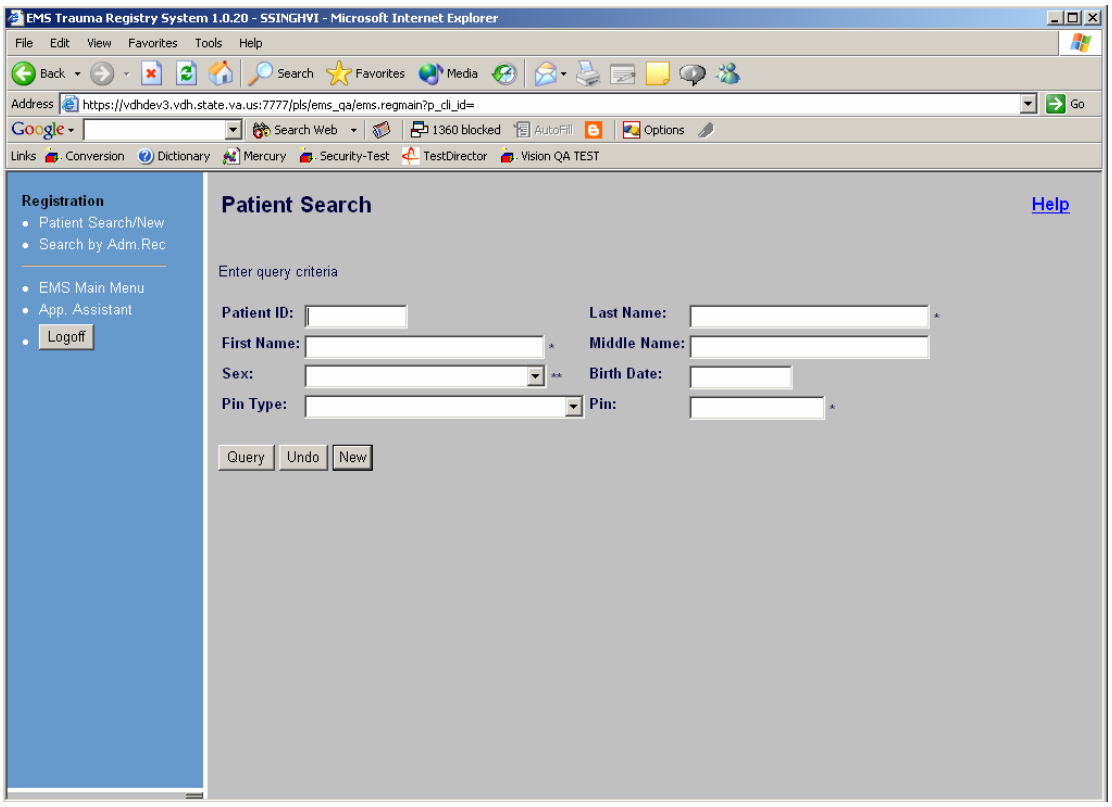
7. **Logoff** – **User** can exit the application.

VIRGINIA STATE TRAUMA REGISTRY WEB APPLICATION SCREENS

PATIENT REGISTRATION – SEARCH SCREEN:

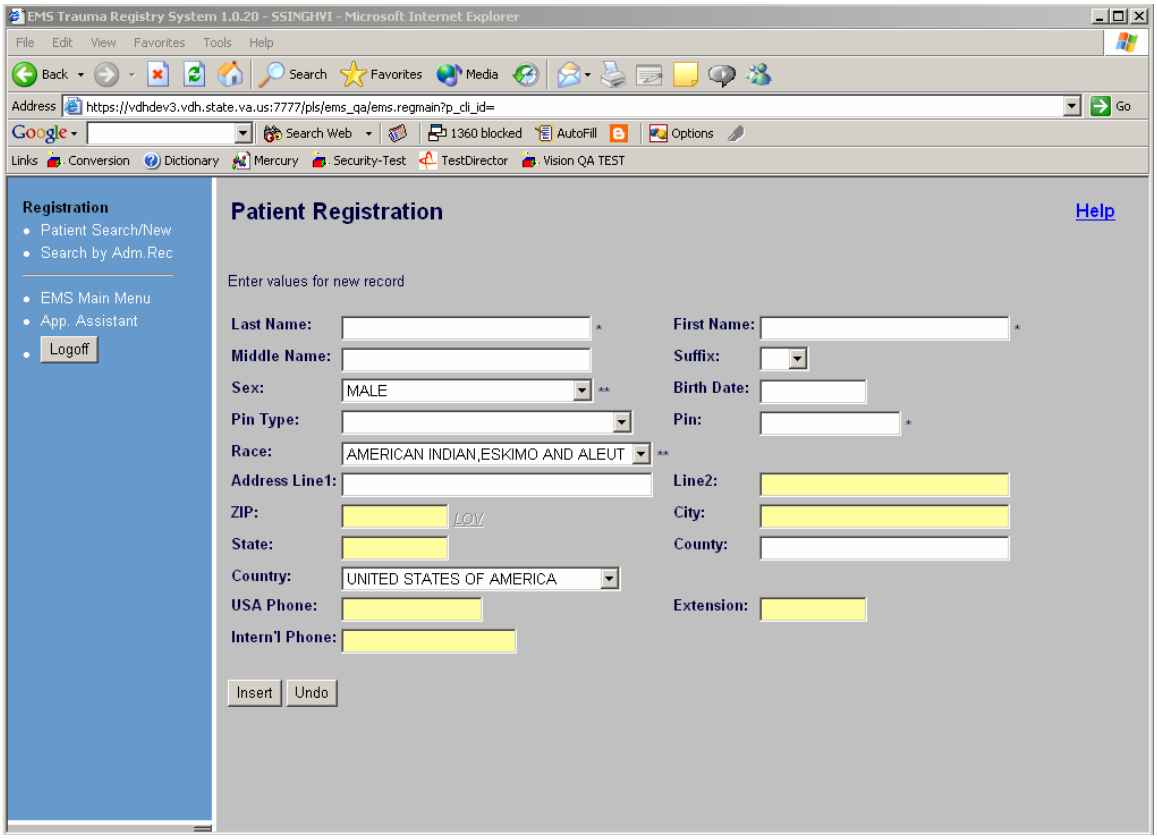
Every Admission entered into the Trauma Registry must be associated with a Patient. Before entering a new Patient Record, you must Query (search) the database to see if the patient has been previously entered. This can be done in 2 ways
1. Search by a combination of the Patient's Name, Sex. Date of Birth or Pin
2. Search by a Specific Medical Record Number.

Registering a patient is the **first step** before entering information about the patient's care at the hospital. This web page is used to query, enter, update or delete new or existing patient records.



Click the Registration link from the main screen after logging onto the system. Now **click** on **"Patient Search/New"** from the side bar and then **click** on **"New"** to create a new patient record. We can also search for an existing patient by their complete patient id or pin number or last name, partial last name and first name (with wildcard search), date of birth and sex combination. When you create a client or find an existing client, the header bar on the screen will display information about the patient for quick view.

PATIENT REGISTRATION NEW SCREEN:



From the Patient Search screen **click** the **"New"** button to enter information to create a new client.

Note: The cursor will be in the "Last Name" field, so you can begin data entry.
You need to tab to move forward through the fields, or use your mouse to access each field.
Asterisk (**) sign indicates a mandatory field and (*) sign indicates a conditional field.

Last Name (*)
Enter the patient's last name (up to 35 characters).

First Name (*)
Enter the patient's first name (up to 35 characters).

Middle Name
Enter the patient's middle name.

Suffix:
Select a suffix by clicking on the down arrow. Click on your selection from the dropdown list. Your selection will display in the field.

Sex (**)
Select the patient's sex by clicking on the down arrow. Click on your selection from the dropdown list. It will display in the field.

Birth Date
Enter the patient's birth date (using **MMDDYYYY** format), if known. NOTE: hyphens (-) and slashes (/) are not necessary. The application will format the date and the birth date will display in the field. If you do NOT know the patient's birth date, then you must record his age in the Admission Details screen.

PIN Type
Select PIN type from the drop down list. Your selection will display in the field. The Pin Type is useful in identifying a patient and should be entered when available

PIN (*)
Insert the SSN (no formatting/spacing required) or the Alien Identification Number. Your selection will display in the field. The application formats the SSN.

Race (**)
Select race from the drop down list.

Address Line 1:
Enter the street name, route, post office box, etc. (up to 30 characters) in this area.

Address Line 2:
Enter any additional information like Apt #, suite # etc. (up to 30 characters) in this area.

Zip:
Enter the zip code (U.S. only) and the application will populate: city, state, FIPS (city/county identification number) and country. *The Zip Code must be at least 5 digits and must be valid within the United States. A Valid Zip Code will retrieve the City, County and State.*

Country
The application defaults to USA. If this is not correct, make a selection from the drop down list.

Note: If the patient has a foreign address, your selection will be "Non-USA." With this selection, the application will allow the user to insert foreign format addresses and zip codes.

USA Phone
Enter the 10 Digit Phone number with area code in the field. The application formats the phone number.

Extension
If appropriate, enter an extension.

International Phone
If the telephone number is foreign, insert the series of numbers under "International Number."

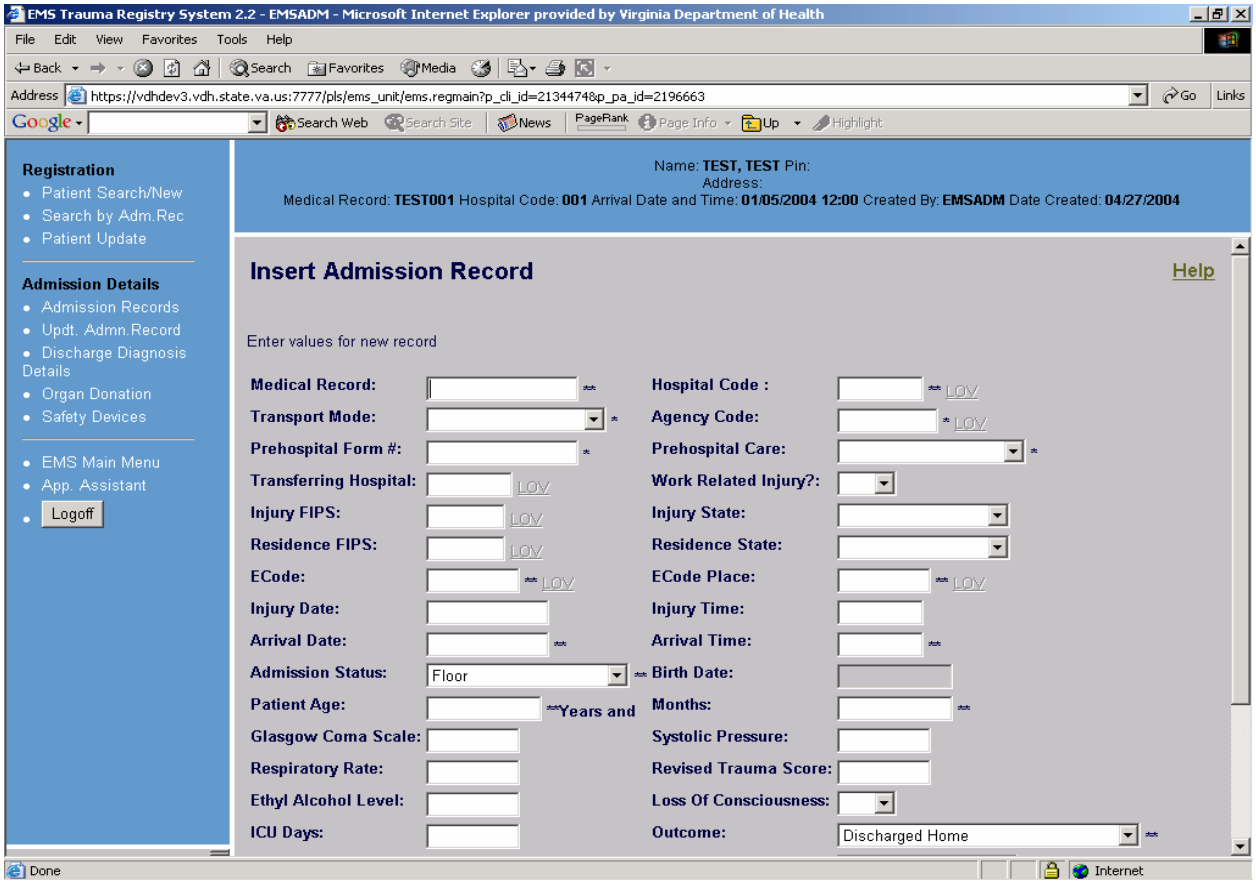
Now when we click the **Insert** button all entries will be inserted into the database and the header will populate for a quick view.

ADMISSION DETAILS SCREEN:

Once the patient identifiers have been entered, you will enter the admission information. An Admission record is all of the information associated with a single stay in the Hospital.

This web page is used to insert, update or delete patient admission information after registering a patient in the trauma system.

Select "Admission Records" from the Admission Details menu. Click the Medical record link if the patient already has an existing record that you wish to modify, otherwise click "New" to enter new admission record.



Medical Record (**).
Enter the patient's medical record number at this hospital. A patient will have only one medical record # at a hospital; no other patient will have the same #. This # can be updated if the patient was previously entered with a temporary identifier.

***Note**: Complete by filling this out exactly as your hospital assigns it, including any letters, spaces and hyphens.*

Hospital Code (**)
Each hospital has an assigned 3-digit number. Each user is assigned to a hospital. Enter your hospital's number or select it from the LOV.

Transport Mode (*)
Select the patient's transport mode to your hospital from the drop down list.
If the Transport mode is not Ambulance, Fixed Wing or Helicopter, these fields cannot be entered. If the Transport mode is Ambulance, Fixed Wing or Helicopter then the following fields should be entered:

1. **Agency Code** (Example: 00579 for Richmond Ambulance Authority)
2. **Prehospital Form Number**
3. **Prehospital Care**

Agency Code (*)
Enter the EMS agency code or select from the LOV. This is a five digit number. The agency code is a 3 or 4 digit number and must be preceded by one or two zeros to comprise the full five digits. Agency Code numbers are assigned to each licensed EMS agency by the Department of Health's Office of Emergency Medical Services.

Prehospital Form # (*)
Enter the agency run report form number in this field. This field is vital to link this data to prehospital data and must be entered if a form is delivered with the patient.

Note: Most agencies utilize a Prehospital Patient Care Report (PPCR) form that is printed and distributed by the State. Each form has a unique identification number (a capital letter followed by several numbers) printed in the upper right corner. Agencies that utilize their own form should create a unique identification number for each form.

If an agency does not use the state form, utilize the agency's record number. If not applicable or if unable to locate a PPCR leave this field blank.

Prehospital Care (*)
Select the Prehospital level of care from the drop down list:
- Basic Life Support
- Advanced Life Support
- N/A
- Unknown

Transferring Hospital Code
This is the 3-digit Hospital Code that is assigned to the acute care hospital from which the patient has been transferred to the current hospital. DO NOT enter this data if the patient is coming from a nursing home, Rehabilitation center, Psychiatric hospital or adult long term residential facility.

Work Related Injury
Make a selection from the drop down list to indicate whether the injury is work related. (Y/N)

Injury FIPS
Enter the county or city in which the injury occurred, or select it from the LOV. If the incident occurred outside of Virginia, leave the field blank. *The **Injury Codes must be five digits** and valid within the United States. Valid FIPS Codes will retrieve the Injury State.*

***Note**: Each locality has a Federal Information Process Standards (FIPS) identification number. In Virginia this 2-digit number begins with 51 and is included with assigned 3-digit numbers for all counties and most major independent cities. This information is **critical** to hospital, local, regional and statewide injury prevention activities.*

***Note:** In Virginia a patient may reside in an incorporated township which does not possess a FIPS code, you must **choose the county in which the township exists if no FIPS code exists** for the patients' town of injury.*

Injury State
Select the state where the injury occurred from the dropdown list. The application defaults to Virginia if no FIPS code is entered.

Residence FIPS
Enter the Virginia county or city where the patient resides, or select it from the LOV. If the patient resides outside of Virginia, leave the field blank. *The Residence Codes must be five digits and valid within the United States. Valid FIPS Codes will retrieve the Residence State.*

Residence State
Enter the patient's state of primary residence from the dropdown list. The application defaults to Virginia if no FIPS code is entered.

ECode (**)
Enter the E Code or select it from the LOV. It details the cause (mechanism) of injury; why the injury occurred; what happened to the patient that resulted in the current condition.

ECode Place (**)
Enter the E Code Place or select it from the LOV.

849.0 Home
849.1 Farm
849.2 Mine & quarry
849.3 Industrial place
849.4 Place for recreation & sport
849.5 Street & Highway
849.6 Public building
849.7 Residential institution
849.8 Other specified place
849.9 Unspecified place

E Code and E Places are entered as numeric digits. The Preceding "E" is not allowed. If you choose an E Code that indicates a motor vehicle accident or a sports related injury, you will be allowed to enter safety device data for the Patient. If the E Code does not indicate that a safety device is appropriate you will not be allowed to navigate to the data entry screen for safety device information. If you are uncertain whether your E Code will allow entry of safety data, you must use the List of Values (LOV) associated with the field to check the safety status.

Injury Date
Enter the injury date in MMDDYYYY format. Note: hyphens (-) and slashes (/) are not necessary. The application will format the numbers.

Injury Time
Enter the injury time, in military time (no colon between numbers). The application will format the time.

Arrival Date (**)
The Arrival Date will be automatically filled with the Injury Date by default. The Users will have the ability to change the Arrival Date, if required.

The Arrival date and time should be greater than the Injury date and time in almost every instance. The exception to this rule is if the patient is admitted to the hospital for a different reason, then is injured traumatically after their arrival. (For example, a seizure patient may have a seizure, fall out of their hospital bed and fracture a bone.) In this instance, a warning message will display, but you may still enter the data.

The Arrival date and time should be greater than the Injury date and time in almost every instance. The exception to this rule is if the patient is admitted to the hospital for a different reason, then is injured traumatically after their arrival. (For example, a seizure patient may have a seizure, fall out of their hospital bed and fracture a bone.) In this instance, a warning message will display, but you may still enter the data.

Admission Status (**)
Admission status refers to the unit/ward that received this patient from your emergency department or as a direct admission from another facility or clinic. Select the admission location from the drop down list.

***Note**: select N/A for any patient who is transferred to another acute care facility or who dies in the emergency department as a result of injury.*

If the Admission Status is ICU then the ICU Days must be one or more.

If the admission status is N/A (Not Admitted) and outcome is transfer to another acute care facility, the total number of days must be Zero.

Birth Date
If Birth Date is entered in the registration screen, then the same date will be displayed in Birth Date field. This is a view only field. If the Birth Date is updated in the registration screen it will be automatically updated in the Admission Record screen

If a Date of Birth was entered for the patient, the Age Years and Age Months will be calculated and the fields unavailable for data entry. If the Date of Birth is not entered on the patient screen, the Age Years and Age Months fields are available for data entry. Either the Age or the Date of Birth is required. Updating the Date of birth on the Patient screen will update the patient age on all corresponding Admission records.

Patient Age: Years and Month (**)
If you did not insert a date of birth in the registration screen, enter the age in this area. Age will appear in the field. Note: if you did enter a date of birth, the application will calculate the patient's age based on injury date and display the information.

Glascow Coma Scale, Systolic Pressure and Respiratory Rate are numeric fields. All three fields are *required* to compute the Revised Trauma Score.

***Note**: Zero values for Systolic Pressure and Respiratory Rate usually indicate that the patient is expired. If a patient has been pronounced dead **prior to arrival** at the hospital, please do not enter their data. We want data only for patients that were deemed viable in some manner.*

- Glasgow Coma Scale:
Enter the patient's Glasgow Coma Scale (GCS) score, as noted by your emergency department. **Valid range** is between **3** and **15**.

- Systolic Blood Pressure:
Enter the patient's first systolic blood pressure (higher value; numerator or top number) documented by the emergency department or receiving unit.
The **valid range** is between **0** and **300**.

- Respiratory Rate:
Enter the patient's first respiratory rate documented by the emergency department or receiving unit. Note: the **valid range** is between **0** and **90**.

- Revised Trauma Score: When the user enters information for the three previous fields (GCS, SBP, RR), the application will calculate the Revised Trauma Score (RTS). The RTS will not calculate unless all 3 of the fields are entered. The RTS is correlated with probability of survival.

The Revised Trauma Score is a calculated field and is not available for data entry. It is updated only when a change is made to one of the three fields from which it is calculated.

Ethyl Alcohol Level
If the lab drew and documented an ETOH (ethanol) level, note it in this area. The **valid range** is **.0 -.9**.

Loss of Consciousness
Select "Yes" or "No" from the loss of consciousness dropdown list, **if applicable**. ***Note**: The Diagnosis Code field is dependant. If you select "No" for the Loss of consciousness field then the Diagnosis Codes that indicate that the patient lost consciousness cannot be entered.*

ICU Days
If the patient spent time in the ICU during their stay, even if they weren't admitted to this unit, enter the total ICU days in this field. Your selection will display in the field.

Outcome (**)
Indicate the patient's final disposition from the drop down list.

***Note**: Transfer to another acute care facility denotes any emergency department or inpatient unit transfers to another acute care hospital (not psychiatric, rehabilitation center, nursing homes or adult long term residential facility).*

If the Outcome is **Expired**, Organ donor data may be entered. If you enter any outcome other than expired, you will not be allowed to navigate to the data entry screen for Organ Donor information.

If the Outcome is **Transferred to an Acute Care Facility**, the Hospital Transferred to and the Outcome Transport (method of transport to the receiving hospital) are required.

If the Outcome is **Prison/Jail** the Outcome Transport is allowed but not required.

If the Outcome is **Inpatient Rehabilitation, Residential Facility, Skilled Nursing Facility or psychiatric facility** the Hospital Transferred to and the Outcome Transport are allowed, but not required.

If the Outcome is **Expired, Discharged Home or Left Against Medical Advice**, the Hospital Transferred to and the Outcome Transport are NOT allowed.

If the Patient Expires or is Transferred to Another Acute Care Facility within three (3) days of their arrival at the hospital, the Outcome time is **required**, otherwise it is not allowed.

IMPORTANT: A patient who has an Outcome of Expired may not have Admission records created after the patient's expiration date. If someone else has indicated that the patient died at their hospital, and you believe that you received the same patient at a later date, you must contact the OEMS Trauma and Critical Care coordinator immediately to resolve this issue.

Receiving Hospital (*)
For patients who are transferred from your hospital to another acute care hospital, enter that hospital code in this area. Make a selection from the LOV.

Outcome Transport (*)
If the Outcome is Inpatient Rehabilitation, Residential Facility, Skilled Nursing Facility Prison/Jail or Transfer to another Acute Care Facility then only you can select the Outcome Transport.

Outcome Date
Enter the Outcome date in MMDDYYYY format. NOTE: hyphens (-) and slashes (/) are not necessary. The application will format the date.

Entering an Outcome causes the Outcome Date to be required. The Outcome Date must be greater than or equal to the Arrival Date.

Outcome Time (**)
Enter the Outcome Time utilizing military time (no colon between numbers). The application will format the time. Note: only document times for transfers or deaths within 3 days of arrival at the hospital.

Total Days
The Total Days is calculated from the difference between Arrival Date and Outcome Date. Any Admission Status other than ER Only will give at least a one day stay in the hospital. If the Admission Status is ER Only, the Total Days and the ICU Stay will always be zero.

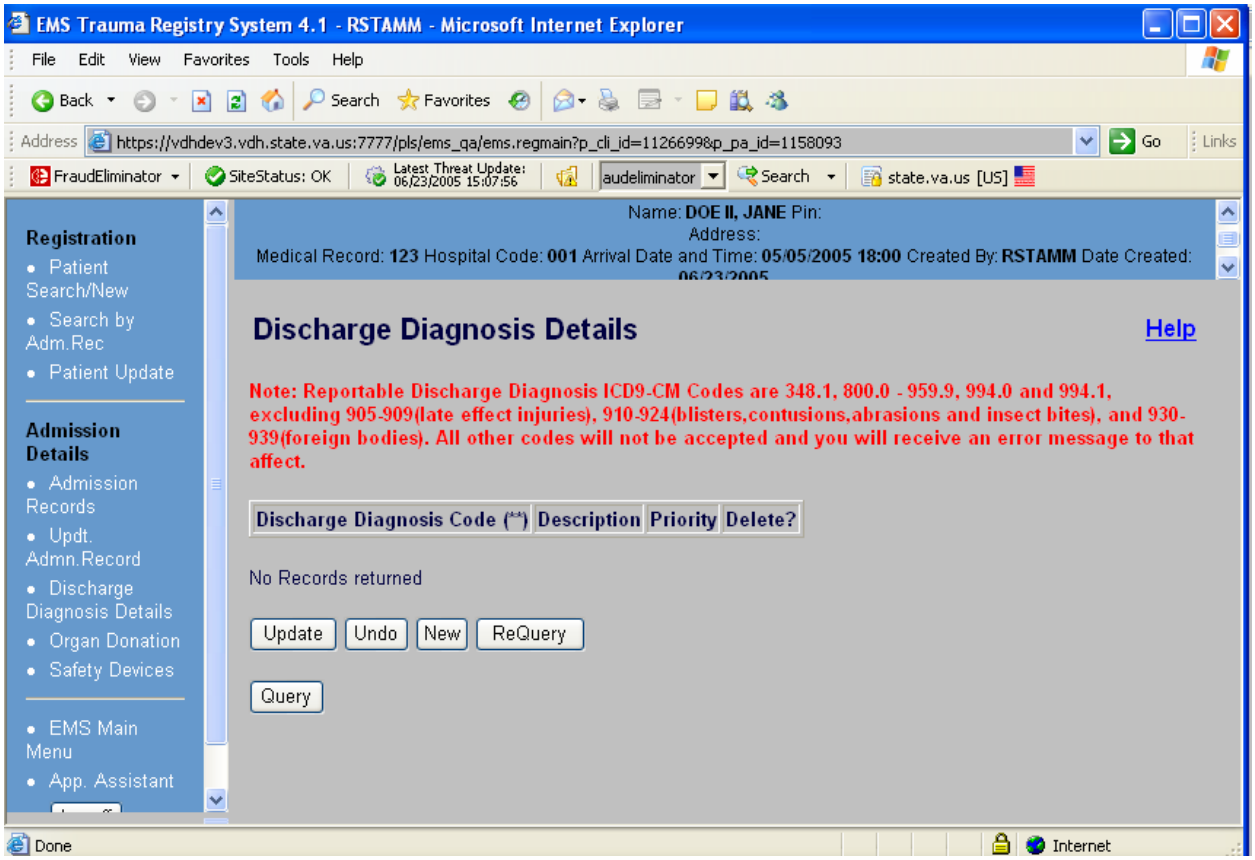
Payor Source
Select "Payor Source" from the dropdown list.

Now click the Insert button and all entries will be inserted into the database.

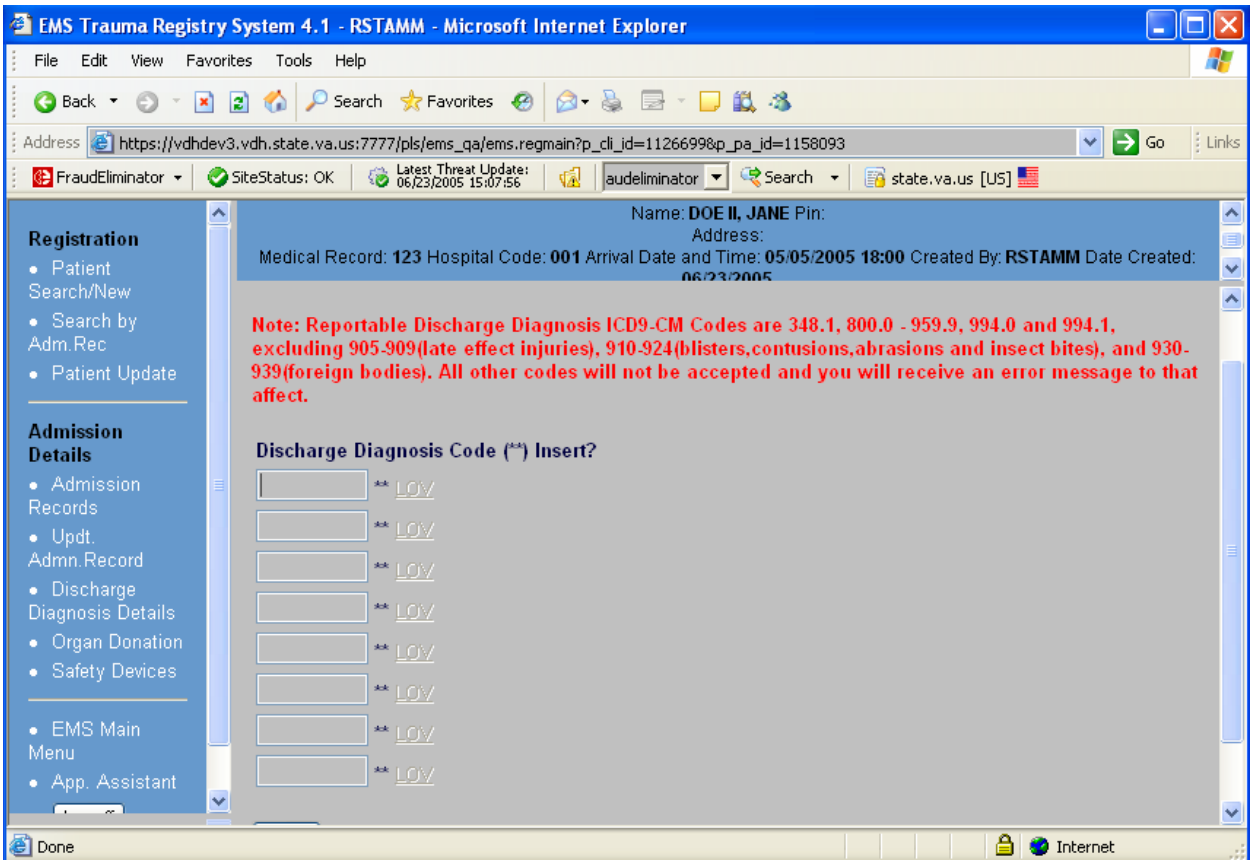
DISCHAGE DIAGNOSIS CODE DETAILS SCREEN:

This screen is used to track patient's discharge diagnosis codes from the hospital and any complications that may be present. A patient may have more than one diagnosis.

Select "Discharge Diagnosis Code Details" from the Admission Details menu. The following screen will display.



Select "New" and the following screen will display.



Enter up to eight (8) diagnoses or select from the LOV.

Discharge Diagnosis Codes are required for each patient in the system. If the patient does not have a discharge diagnosis code as indicated below the patient does not belong in the system. A discharge diagnosis code may be entered up to two times for a patient (for example, to indicate bilateral femur fractures.) No more than two entries of the same diagnosis code are allowed. If the Admission record is later updated to a Loss of Consciousness that does not match that chosen in the Diagnosis Details, the user must delete all Diagnosis Detail records that clash before the update can be made.

PATIENTS THAT NEED TO BE REPORTED:

1. Injured/Trauma **patients admitted** to the facility with **ICD9-CM codes of 348.1, 800.0 - 959.9, 994.0** and **994.1**, **excluding** 905-909 (late effect injuries), 910-924 (blisters, contusions, abrasions and insect bites), and 930-939 (foreign bodies).

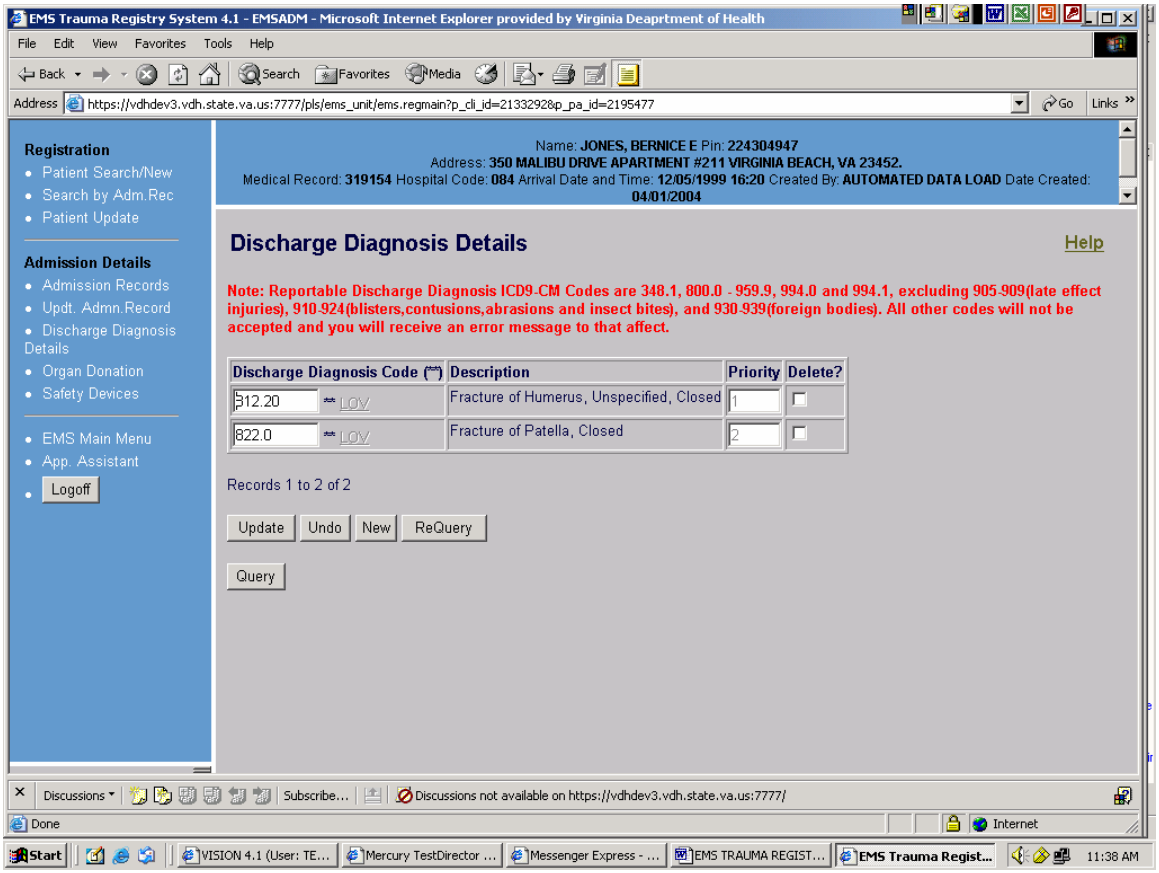
*This reporting includes **ALL admissions for observation, including 23 hours** as an inpatient; NOT ER observation unless held in the ER due to no inpatient bed availability. Patients not admitted to an inpatient status do not need to be reported. It also includes reporting all admissions for patients where the trauma codes are **secondary diagnoses**.*

2. Injured/Trauma **patients transferred** from one hospital to another because of acute trauma (patient may be transferred directly from the Emergency Department or from an inpatient unit.

3. **Victims of acute trauma that die** within the hospital, including, the emergency department and those who are DOA ***after arrival*** to the hospital.

Select "Insert."
The diagnoses codes will automatically be inserted into the database.

Select "Discharge Diagnosis Code Details" again from the Admission Details menu or from the bottom of the Discharge Diagnosis Code Details screen. The following will display.



SAFETY DEVICES SCREEN:

This screen is used to choose the safety devices that were available to the patient at the time of injury and to indicate if the device was in use.

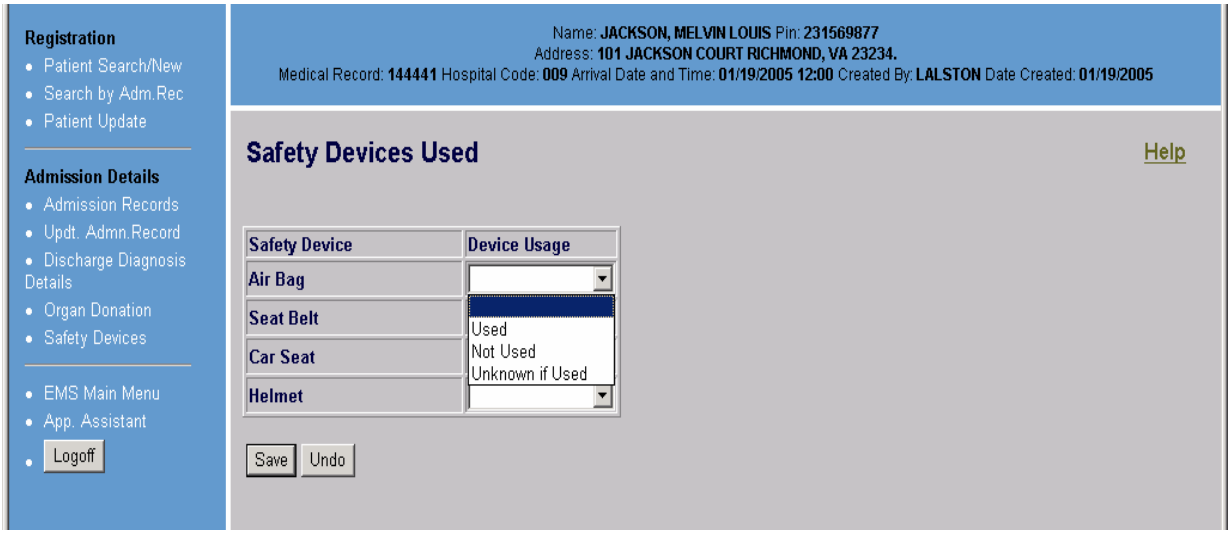
Select "Safety Devices" from the Admission Details menu.

There is a FIELD labeled, "DEVICE USAGE" with a drop-down box containing the following options as seen in the next snapshot:

- ***USED***
- ***NOT USED***
- ***UNKNOWN if USED***

The user may select any of these choices to indicate safety device usage for each item.

The following screen will display.



If safety device utilization is recorded in the medical record, click on the appropriate selection.

Patient Safety Devices are only allowed if the E Code (Cause Code) indicates that the patient was injured in a Motor Vehicle Accident or in one of several types of sports that allow the use of protective devices. The Car Seat option will display a warning if the patient is over 8 years of age, but will allow the entry of the code (for example a child may be over eight years of age, but be very petite, allowing them to still use the car seat for protection.)

If the Admission record is later updated to an E-Code that is not safety related, the user must delete all Safety Device records before the update can be made.

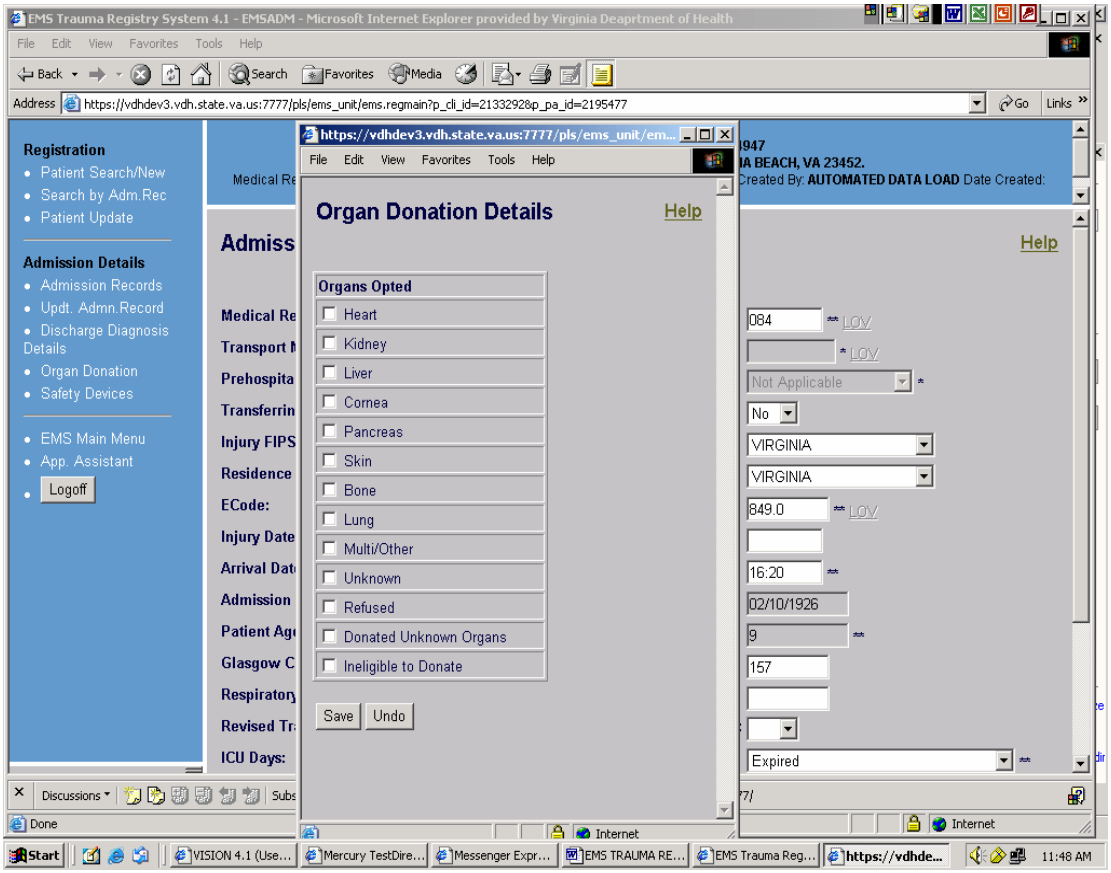
Select "Save" and selection(s) will be inserted into the database.

ORGAN DONATION SCREEN:

Organs Opted For Donation: This screen is used ONLY IF PATIENT HAS EXPIRED regardless of whether they were designated as an organ donor or not. Selection options include a list of organs, unknown, donated but unknown and ineligible to donate. Multiple organs may be chosen.

When outcome field is changed to "expired", the Organ Donation Details screen will pop-up in a new window. Users cannot save the admission record without completing and saving the Organ Donation Details screen. [**NOTE: Windows XP users must disable pop-up blocker for this page**]

Select "Organ Donation" from the pop-up window.



If this patient had not expired, organ donation information cannot be entered.

If the patient expires, and you enter Organ Donation Details, you may not choose Unknown or Refused along with any other options. Additionally, you may not choose both Unknown and Refused. You may choose as many of the other options in conjunction as you like. If the Admission record is later updated to an Outcome that is not Expired, the user must delete all Organ Donor records before the update can be made.

Select "Save" and information will be inserted into the database.

REPORTS SCREEN:

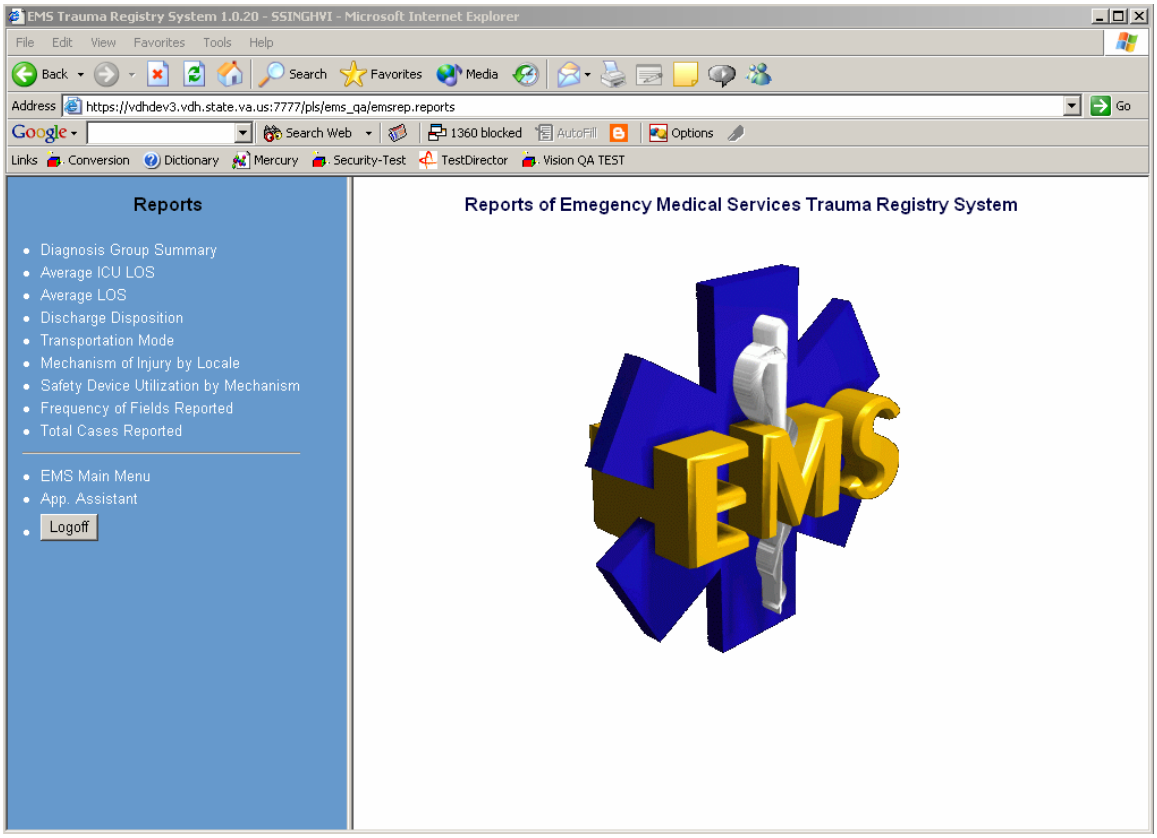
About Reports:
The EMS Statewide Trauma Registry System has a long series of reports which may be generated. These reports may be accessed by clicking on the desired reports link.

The **REPORTS link is located** on the **Main Menu** web page. The following view shows a listing of the reports which may be generated:

To access a specific report, click on its respective link in the blue sidebar.

In most cases, users will be able to generate the report in *two formats*:

(1) Straight report and/or
(2) Chart form by clicking on either the **RUN REPORT** or **CHART button** found on each report's input page.



CONCLUSION

Logging Off:

Please Log Off after working through the Application by clicking the Log Off Button at the bottom of the sidebar.

OTHER USEFUL WEB LINKS:

VA FIPS Codes Links:

Virginia FIPS Code 051: http://www.crh.noaa.gov/mkx/nwr/fips-va.htm
Virginia FIPS Code 051: http://www.itl.nist.gov/fipspubs/co-codes/va.txt

FIPS Codes by State: http://www.crh.noaa.gov/mkx/nwr/fips-usa.htm
FIPS Codes by state: http://www.census.gov/datamap/fipslist/AllSt.txt
FIPS Codes by State: http://www.itl.nist.gov/fipspubs/co-codes/states.htm

ICD9 Coding: http://www.icd9coding1.com/flashcode/home.jsp

Office of Emergency Medical Services Main Page
http://www.vdh.virginia.gov/oems/

Trauma System – Trauma Registry Main Page
http://www.vdh.virginia.gov/oems/oems_general/traumacenters.asp

Index of Changes-Revisions: [Original release - September 2004]

February 2, 2005 [OEMS changes]

Page 2 - PATIENT REPORTING CRITERIA:

1. Injured/Trauma patients admitted to the facility with ICD9-CM codes of 348.1, 800.0 - 959.9, 994.0 and 994.1, excluding 905-909 (late effect injuries), 910-924 (blisters, contusions, abrasions and insect bites), and 930-939 (foreign bodies).

Code 348.1 is for anoxic brain injury, Code 994.0 is for lightning strike and Code 994.1 is for drowning/submersion.

This reporting includes:
- ALL admissions for observation, including 23 hours as an inpatient; NOT ER observation unless held in the ER due to no inpatient bed availability. Patients not admitted to an inpatient status do not need to be reported.

Page 8 - List of Hospitals (LOV)
Each non-Virginia state will display only ONE FIPS CODE for that entire state as shown below.

Page 9 - Ways the User's can use the LOV
(Wild card searches deleted)

B. Voluminous “pop-up box” directive: Occasionally, when an LOV search is attempted, a pop-up box message will be generated, informing the user that there is a voluminous, or very extensive, list of values available for selection. Furthermore, in order to perform an effective search, it is recommended that the user enter at least one but, preferably, several alpha or numeric characters into the adjacent field to narrow the resultant listing.

• On Multi-Record Web Pages, the NEXT and PREVIOUS buttons will only appear when there is a total of 6 or more records. Web pages are created with six lines. When a page is full, pressing the NEXT button will reveal a page with six new lines.

• Exiting Web Pages and/or Pop-Up Boxes: Be sure to exit out of any web pages or pop-up boxes when you are finished working in them. Otherwise, when you attempt to use that web page or pop-up (the same applies to LOV's and down arrows), it will NOT work and may also give an error message.

Page 9 - Passwords
NOTE: Passwords are REQUIRED to be at least 8 characters in length. They MUST also contain a minimum of 6 alphabetic characters and 2 numerals or special characters.

Page 23 - Discharge Diagnosis Codes
Discharge Diagnosis Codes are required for each patient in the system. If the patient does not have a discharge diagnosis code as indicated below the patient does not belong in the system. A discharge diagnosis code may be entered up to two times for a patient (for example, to indicate bilateral femur fractures.) No more than two entries of the same diagnosis code are allowed. If the Admission record is later updated to a Loss of Consciousness that does not match that chosen in the Diagnosis Details, the user must delete all Diagnosis Detail records that clash before the update can be made.

PATIENTS THAT NEED TO BE REPORTED:

1. Injured/Trauma patients admitted to the facility with ICD9-CM codes of 348.1, 800.0 - 959.9, 994.0 and 994.1, excluding 905-909 (late effect injuries), 910-924 (blisters, contusions, abrasions and insect bites), and 930-939 (foreign bodies).

This reporting includes ALL admissions for observation, including 23 hours as an inpatient; NOT ER observation unless held in the ER due to no inpatient bed availability. Patients not admitted to an inpatient status do not need to be reported. It also includes reporting all admissions for patients where the trauma codes are secondary diagnoses.

Page 25 - SAFETY DEVICES
There is a FIELD labeled, "DEVICE USAGE" with a drop-down box containing the following options as seen in the next snapshot:

- USED
- NOT USED
- UNKNOWN if USED

The user may select any of these choices to indicate safety device usage for each item.

(Screen image updated to reflect changes made in defect tracker)

Page 26 - ORGAN DONATION SCREEN
Organs Opted For Donation: This screen is used ONLY IF PATIENT HAS EXPIRED regardless of whether they were designated as an organ donor or not. Selection options include a list of organs, unknown, donated but unknown and ineligible to donate. Multiple organs may be chosen.

(Screen image updated to reflect changes made in defect tracker)

June 24, 2005 [OIM EMS Release Notes V4.1]

Pages 22, 23, 24

The Field Level HelpText (FLHT) has been changed to add the word "Discharge" to the diagnosis codes and descriptions in Discharge Diagnosis Detail and Maintenance screens.

The following note has been added to the Discharge Diagnosis Details screen, "Note: Reportable Discharge Diagnosis ICD9-CM Codes are 348.1, 800.0 - 959.9, 994.0 and 994.1, excluding 905-909(late effect injuries), 910-92 (blisters, contusions, abrasions and insect bites), and 930-939 (foreign bodies). All other codes will not be accepted and you will receive an error message to that affect." This will serve as a guide for the users when entering Discharge Diagnosis codes.

Page 26

When outcome field is changed to "expired", the Organ Donation Details screen will pop-up in a new window. Users cannot save the admission record without completing and saving the Organ Donation Details screen.

FIPS CODES FOR VIRGINIA (VA) COUNTIES - (51)

CODE	NAME	CODE	NAME	CODE	NAME
001	Accomack	075	Goochland	153	Prince William
003	Albemarle	077	Grayson	155	Pulaski
005	Alleghany	079	Greene	157	Rappahannock
007	Amelia	081	Greensville	159	Richmond
009	Amherst	083	Halifax	161	Roanoke
011	Appomattox	085	Hanover	163	Rockbridge
013	Arlington	087	Henrico	165	Rockingham
015	Augusta	089	Henry	167	Russell
017	Bath	091	Highland	169	Scott
019	Bedford	093	Isle of Wight	171	Shenandoah
021	Bland	095	James City	173	Smyth
023	Botetourt	097	King and Queen	175	Southampton
025	Brunswick	099	King George	177	Spotsylvania
027	Buchanan	101	King William	179	Stafford
029	Buckingham	103	Lancaster	181	Surry
031	Campbell	105	Lee	183	Sussex
033	Caroline	107	Loudoun	185	Tazewell
035	Carroll	109	Louisa	187	Warren
036*	Charles City	111	Lunenburg	191	Washington
037*	Charlotte	113	Madison	193	Westmoreland
041	Chesterfield	115	Mathews	195	Wise
043	Clarke	117	Mecklenburg	197	Wythe
045	Craig	119	Middlesex	199	York
047	Culpeper	121	Montgomery		
049	Cumberland	125	Nelson		
051	Dickenson	127	New Kent		
053	Dinwiddie	131	Northampton		
057	Essex	133	Northumberland		
059	Fairfax	135	Nottoway		
061	Fauquier	137	Orange		
063	Floyd	139	Page		
065	Fluvanna	141	Patrick		
067	Franklin	143	Pittsylvania		
069	Frederick	145	Powhatan		
071	Giles	147	Prince Edward		
073	Gloucester	149	Prince George		

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The codes for Charles City and Charlotte Counties, reported respectively as 037 and 039 in FIPS PUB 6-3, have been corrected. The Bureau of Economic Analysis, U.S. Department of Commerce has defined codes in the 900 series to represent county/independent city combinations in Virginia.

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INDEPENDENT CITIES of Virginia

CODE	NAME	CODE	NAME
510	Alexandria (city)	683	Manassas (city)
515	Bedford (city)	685	Manassas Park (city)
520	Bristol (city)	690	Martinsville (city)
530	Buena Vista (city)	700	Newport News (city)
540	Charlottesville (city)	710	Norfolk (city)
550	Chesapeake (city)	720	Norton (city)
560	Clifton Forge (city)	730	Petersburg (city)
570	Colonial Heights (city)	735	Poquoson (city)
580	Covington (city)	740	Portsmouth (city)
590	Danville (city)	750	Radford (city)
595	Emporia (city)	760	Richmond (city)
600	Fairfax (city)	770	Roanoke (city)
610	Falls Church (city)	775	Salem (city)
620	Franklin (city)	780	South Boston (city)
630	Fredericksburg (city)	790	Staunton (city)
640	Galax (city)	800	Suffolk (city)
650	Hampton (city)	810	Virginia Beach (city)
660	Harrisonburg (city)	820	Waynesboro (city)
670	Hopewell (city)	830	Williamsburg (city)
678	Lexington (city)	840	Winchester (city)
680	Lynchburg (city)		